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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/716,018	11/17/2000	Robert Huber	00 P 7777 US 01	6535

7590 09/17/2003

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EXAMINER

KASENGE, CHARLES R

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 09/17/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/716,018

Applicant(s)

HUBER, ROBERT

Examiner

Charles R Kasenge

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed July 15, 2003 have been fully considered but they are not persuasive. The Applicant asserts that Song does not disclose a "difference editor" or a device displaying differences between two sets of data, however the Office respectfully disagrees. Song discloses a difference editor executable on the processor to display differences between at least one of the electronic manufacturing data sets and the manufacturing standardization data (col. 8, lines 30-40). The office interprets the values, graphs, waveforms, text, diagrams, and the like from the display part as displaying differences between manufacturing data and standardization data (col. 8, lines 24-29 and col. 10, lines 10-28). The office interprets Figs. 10-19 as possible graphs, diagrams, and the like the display part.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

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reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Song et al. U.S. Patent 6,487,472. Referring to claim 1, Song discloses a system for managing electronics manufacturing data (col. 1, lines 59-67) comprising: a processor (col. 3, lines 25-30); a data storage device operably connected to the processor, the data storage, device storing manufacturing standardization data and a plurality of electronic manufacturing data sets, each of the plurality of electronic manufacturing data sets corresponding to a local manufacturing process (col. 3, lines 3-13); and a difference editor executable on the processor to display differences between at least one of the electronic manufacturing data sets and the manufacturing standardization data (col. 8, lines 30-40). Referring to claim 2, the data storage device includes a server for providing the manufacturing standardization data (col. 9, lines 15-20 and col. 8, line 32-33).

Referring to claim 3, Song discloses the system as recited in claim 2 wherein the data storage device further includes a control system for providing a first of the plurality of electronic manufacturing data sets, the processor being located at the control system (col. 8, lines 30-40). Referring to claim 4, the data storage device includes a central server for providing the manufacturing standardization data, a first control system for providing a first of the plurality of electronic manufacturing data sets, and a second control system for providing a second of the plurality of electronic manufacturing data sets; or data transmission between fabrication systems, the control system, and the diagnosis system (col. 9, lines 15-20)

Referring to claim 5, Song discloses a method for managing electronics manufacturing data, in which the data comprises first and second sets, wherein the first and second sets each comprise data structures stored in at least one computer-readable storage medium, that correspond to one another but that may differ in the specific data they comprise (col. 3, lines 3-13 and col. 8, lines 30-40), the method comprising the steps of retrieving from the at least one computer-readable storage medium at least a portion of a first data structure from the first set; retrieving from the at least one computer-readable storage medium at least a portion of a second data structure corresponding to the second set; and permitting observation of at least one difference between the first and second data structures (col. 8, lines 30-40).

Referring to claim 6, Song discloses the method according to claim 5 wherein the at least one storage medium comprises first and second servers, and wherein the first set of electronics manufacturing data is stored on the first server, or storage device, and the second set of electronics manufacturing data is stored on the second server, or storage device (col. 8, lines 30-40). Referring to claim 7, the method according to claim 5 wherein the first and second sets of electronics manufacturing data each reside in a separate, respective database (col. 8, lines 30-40). It is inherent that the data stored in a storage device will be stored in a database. Referring to claim 8, the first and second data structures are objects (col. 8, lines 30-40).

Referring to claims 9 and 10, Song discloses the method according to claim 5 wherein the observation of at least one difference is made on the basis of a graphical display (col. 12, lines 35-45) and textual display (col. 13, lines 37-43).

Referring to claim 11, Song discloses a method for managing of electronics manufacturing data, in which the data comprises non-local data and local data (col. 3, lines 16-

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25), comprising the steps of: permitting non-local electronics manufacturing data to be modified by a first set of persons (col. 8, lines 30-40); permitting local electronics manufacturing data to be modified by a second set of persons (col. 11, lines 3-4); and permitting a comparison between local electronics manufacturing data and non-local electronics manufacturing data wherein the first and second sets of persons are not identical (col. 10 and 11, lines 64-67 and 1-4). Song discloses the diagnosis system being connected to the Internet, so data can be monitored and modified worldwide. Referring to claim 12, the method as recited in claim 11 wherein the permitting the comparison step includes displaying differences between the local electronics manufacturing data and the non-local electronics manufacturing data (col. 8, lines 30-40).

Referring to claims 13 and 14, the method as recited in claim 12 wherein the displaying step includes displaying a graphical representation of an electronic component and highlighting the differences (col. 12, lines 35-45).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 15-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Song et al. as applied to claims 1-14 above, and further in view of Cullen et al. U.S. Patent 5,805,5722.

Although Song discloses displaying manufacturing data differences, Song does not expressly disclose displaying lead information of an electronic component. Cullen discloses using lead

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information for inspecting and placing lead devices (col. 6, lines 27-32). Cullen also discloses a manufacturing system and method being applied to printed circuit board assembly lines (col. 1, lines 9-18). The manufacturing system uses a controller controlled by manufacturing data (col. 8, lines 41-44) and a placement machine for placing components on a printed circuit board (col. 1, lines 9-18).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to monitor and display lead information for Song's invention. One of ordinary skill in the art would have been motivated to do this since lead information for device placement and inspecting circuit boards is vital for quality control and increasing manufacturing efficiency (col. 1, lines 38-61). It would have been obvious to apply Song's invention to printed circuit boards since it is commonly known that semiconductor manufacturing is part of the circuit board manufacturing process.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

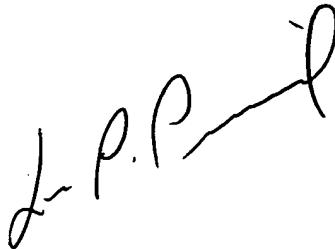
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles R Kasenge whose telephone number is 703 305-8592.

The examiner can normally be reached on Monday through Friday, 8:30 - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 703 308-0538. The fax phone numbers for the organization where this application or proceeding is assigned are 703 746-7239 for regular communications and 703 746-7239 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0538.

CK
September 12, 2003

A handwritten signature in black ink, appearing to read 'L. P. Picard', written in a cursive style.

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100